

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

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|---------------------------------|---|----------------------------|
| TRANSOCEAN OFFSHORE | § | |
| DEEPWATER DRILLING, INC., | § | |
| | § | |
| Plaintiff, | § | |
| | § | |
| v. | § | CIVIL ACTION NO. H-03-2910 |
| | § | |
| GLOBALSANTAFE CORP., | § | |
| GLOBAL MARINE, INC., | § | |
| GLOBAL SANTA FE DRILLING CO., | § | |
| and GLOBAL MARINE DRILLING CO., | § | |
| | § | |
| Defendants. | § | |

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MEMORANDUM OPINION AND ORDER

Plaintiff, Transocean Offshore Deepwater Drilling, Inc., (Transocean), brings this action against defendants, GlobalSantaFe Corp., Global Marine, Inc., Global Santa Fe Drilling Co., and Global Marine Drilling Co. (collectively, "GSF"), for direct infringement of U.S. Patent No. 6,047,781 ('781 Patent), U.S. Patent No. 6,056,071 ('071 Patent), U.S. Patent No. 6,068,069 ('069 Patent), and U.S. Patent No. 6,085,851 ('851 Patent; collectively, "the patents-in-suit"). GSF asserts counterclaims for declaratory judgment of noninfringement, patent invalidity, and/or unenforceability for each of the patents-in-suit. Pending before the court are five motions: (1) GSF's Motion for Partial Summary Judgment Regarding Conception Date (Docket Entry No. 89), (2) GSF's Motion for Partial Summary Judgment of Invalidity of Apparatus Claims (Docket Entry No. 93), (3) Plaintiff Transocean's Response to and Cross-Motion for Partial Summary Judgment Concerning Conception (Docket Entry Nos. 96 and 97), (4) Plaintiff Transocean's Motion for Partial Summary Judgment that Transocean's Invention was Not Derived from either Maritime Hydraulics' Twin Ram Rig or Maritime Engineering's ME 5500 Brochure (Docket Entry No. 106), and (5) Plaintiff Transocean's Motion for Partial Summary Judgment on Prior Art (Docket Entry No. 108). For the reasons explained below the pending motions will be granted in part and denied in part.

I. Procedural Background

Transocean seeks judgment that GSF's Development Driller I and II (DD I and DD II) infringe the patents-in-suit. The court has already held that Transocean is entitled to summary judgment on its apparatus claims. GSF seeks declaratory judgment that the asserted claims are invalid because they were anticipated, derived, or obvious from the prior art or, in the alternative, that they are unenforceable due to Transocean's inequitable conduct during the patent prosecution.

A. Claims Asserted

Transocean is the assignee of the four patents-in-suit, each of which is for a Multi-Activity Offshore Exploration and/or Development Drilling Method and Apparatus.¹ This action centers around a bid that GSF submitted to British Petroleum Amoco (BP) for a development project in the Gulf of Mexico and a development contract awarded to GSF in October of 2004 by BHP Billiton Petroleum (Americas) Inc. (BHP). Transocean alleges that GSF's BP bid was for a dual activity structure, the DD II, and a method for conducting dual activity operations that infringe the patents-in-suit,² and that a contract awarded to GSF by BHP was for a dual

¹See Plaintiff's Second Amended Complaint, Docket Entry Nos. 63 and 65, p. 2.

²Id. at p. 3, ¶¶ 15-17. See also Original Complaint, Docket Entry No. 1, p. 3, ¶¶ 15-17.

activity structure, the DD I, and a method for conducting dual activity operations that infringe the patents-in-suit.³

B. Claim Construction

On April 5, 2005, the court construed the terms

"single well," "a well," and "the well" to mean "expressly limited to dual drilling stations conducting operations on a single well or methods for conducting simultaneous operations from dual drilling stations on a single well;" the terms "transfer," "transferring," "transfer means" to mean "direct transfers, intermediate transfers, and combinations thereof;" the term "advancing" to mean "lowering and raising tubular members," the term "advancing means" to mean "equipment used to raise and lower pipe," and the term "tubular advancing station" to mean "a location on a drilling floor or drilling deck where tubular members are advanced to or into the seabed;" the terms "operations auxiliary to drilling operations" and "auxiliary drilling activity" to have the same meaning, i.e., "operations related to drilling a well and progressing that well toward production but not directly involved in physically advancing or expanding the wellbore;" the terms "simultaneous" and "simultaneously" to mean overlapping in time; and the term "one of ordinary skill in the art" to be one who "has a bachelor's degree in a pertinent engineering discipline, such as petroleum engineering or mechanical engineering, and ten years' experience in petroleum drilling, at least half of which is offshore experience."⁴

C. Prior Order Granting Summary Judgment of Infringement

On November 29, 2005, the court entered a Memorandum Opinion and Order granting in part and denying in part Transocean's motion

³Id. at p. 3, ¶¶ 18-19.

⁴Memorandum Opinion, Docket Entry No. 69, p. 24.

for partial summary judgment (Docket Entry No. 84). Since GSF did not dispute Transocean's assertion that its DD I and DD II rigs contain each of the structural elements described in apparatus claims 10-12 of the '781 patent, claims 9, 14-16, and 27-29 of the '071 patent, and claim 17 of the '069 patent, and since GSF failed to submit any evidence from which a reasonable trier of fact could conclude that the rigs' means for transferring pipe between the two drill centers does not facilitate simultaneous drilling operations and auxiliary drilling operations on a single well, the court granted Transocean summary judgment on its claims that GSF's rigs infringed apparatus claims 10-12 of the '781 patent, claims 9, 14-16, and 27-29 of the '071 patent, and claim 17 of the '069 patent. Since, however, Transocean failed to persuade the court that 35 U.S.C. § 271(a)'s prohibition against "offers to sell" encompasses offers to perform an infringing method, and failed to submit evidence that GSF has used or practiced the allegedly infringing methods, the court denied Transocean summary judgment on its method claims.

D. Currently Disputed Claims

In response to GSF's pending motions Transocean states that it is now asserting infringement of only five claims:

- '071 Patent Claim 23 (Ex. 26)
- '069 Patent Claims 10, 17 (Ex. 27)
- '781 Patent Claims 11, 20 (Ex. 25).

The apparatus claims 11 and 17 generally cover offshore rigs that perform drilling and auxiliary drilling operations simultaneously to the seabed from two

stations in a single derrick. The claims require equipment to transfer pipe between the two stations. Claim 11 also requires more specific drilling equipment, including drawworks, top drive, traveling blocks, and pipe handlers.

The method claim of 20 generally covers advancing pipe to the seabed from two stations for simultaneous drilling and auxiliary drilling operations, and transferring pipe between the stations. Claims 10 and 23 generally cover lowering a blowout preventer (BOP) from one station while drilling the top hole section of the well from the other station. Claim 10 further includes the steps of repositioning and attaching the lowered BOP, making up stands of pipe in the other station, transferring the stands to the BOP station, and lowering the stands through the BOP to the well.⁵

II. Standard of Review

Summary judgment is authorized if the movant establishes that there is no genuine dispute about any material fact and the law entitles it to judgment. Fed. R. Civ. P. 56(c). Disputes about material facts are "genuine" if the evidence is such that a reasonable jury could return a verdict for the nonmoving party. Anderson v. Liberty Lobby, Inc., 106 S.Ct. 2505, 2511 (1986). The Supreme Court has interpreted the plain language of Rule 56(c) to mandate the entry of summary judgment "after adequate time for discovery and upon motion, against a party who fails to make a

⁵Plaintiff Transocean's Response to and Cross-Motion for Partial Summary Judgment Concerning Conception, Docket Entry Nos. 96 and 97, pp. 4-5. See also Plaintiff Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 108, p. 2, asserting that "Transocean asserts five claims against GSF: claim 23 of Patent No. 6,056,071, claims 10 and 17 of Patent No. 6,068,069, and claims 11 and 20 of Patent No. 6,047,781."

showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." Celotex Corp. v. Catrett, 106 S.Ct. 2548, 2552 (1986). A party moving for summary judgment "must 'demonstrate the absence of a genuine issue of material fact,' but need not negate the elements of the nonmovant's case." Little v. Liquid Air Corp., 37 F.3d 1069, 1075 (5th Cir. 1994) (en banc), (quoting Celotex, 106 S.Ct. at 2553-2554). If the moving party meets this burden, Rule 56(c) requires the nonmovant to go beyond the pleadings and show by affidavits, depositions, answers to interrogatories, admissions on file, or other admissible evidence that specific facts exist over which there is a genuine issue for trial. Id. (citing Celotex, 106 S.Ct. at 2553-2554). "[T]he nonmoving party's burden is not affected by the type of case; summary judgment is appropriate in any case where critical evidence is so weak or tenuous on an essential fact that it could not support a judgment in favor of the nonmovant." Id. In reviewing the evidence "the court must draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence." Reeves v. Sanderson Plumbing Products Inc., 120 S.Ct. 2097, 2110 (2000). Factual controversies are to be resolved in favor of the nonmovant, "but only when . . . both parties have submitted evidence of contradictory facts." Little, 37 F.3d at 1075.

III. Undisputed Facts

In late 1995 inventor Robert Herrmann began consulting with Sonat Offshore Drilling, now known as Transocean Offshore Deepwater Drilling, Inc. and the plaintiff in this action, to design a new, more efficient offshore drilling rig.⁶ Herrmann worked with Robert Scott and Don Ray.⁷ In February of 1996 Herrmann, Scott, and Ray met with Bradford Kile, Transocean's patent attorney, to discuss their concepts, and on May 3, 1996, Kile filed a patent application that resulted in the patents-in-suit.⁸

In January of 1996 Maritime Engineering AS (together with R.S. Platou Offshore AS and Mercur Subsea Products AS) developed a design for an offshore drilling rig known as the ME 5500 Dual Rig System.⁹ On February 8, 1996, Sturla Fjoran, a naval architect for Maritime Engineering, and his project engineer completed a brochure with drawings for the dual rig system known as the ME 5500.¹⁰ On

⁶Declaration of Robert Herrmann (Hermann Declaration), included in Exhibits to Plaintiff Transocean's Response to and Cross-Motion for Partial Summary Judgment Concerning Conception Date, Docket Entry No. 98, ¶ 2.

⁷Id. at ¶ 4.

⁸Declaration of Bradford Kile (Kile Declaration), included in Exhibits to Plaintiff Transocean's Response to and Cross-Motion for Partial Summary Judgment Concerning Conception Date, Docket Entry No. 98, ¶ 24.

⁹Declaration of Sturla Fjoran (Fjoran Declaration), Exhibit 3 attached to Plaintiff Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 108, ¶ 4, and Exhibit 1 attached to GSF's Opposition to Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 114, ¶ 4.

¹⁰Id. at ¶¶ 4-5.

February 8 or 9, 1996, Fjoran gave the ME 5500 brochure to Smedvig, a Norwegian drilling contractor, and on February 21, 1996, he gave the ME 5500 brochure to Transocean ASA, the Norwegian drilling contractor that later merged with Sonat to form the plaintiff in this action.¹¹ Between March 10 and 19, 1996, Fjoran visited Houston and gave copies of the ME 5500 brochure to Sonat, Diamond Offshore, and to Santa Fe and Global Marine, predecessors to the defendants in this action.¹²

In January of 1996 Maritime Hydraulics began developing a new rig.¹³ By February 20, 1996, Maritime Hydraulics had prepared drawings of the Twin Ram Rig that were given to Norwegian contractor Smedvig on February 21, 1996.¹⁴ Between March 4 and 14, 1996, Maritime Hydraulics' marketer, Vidar Skjelbred, met with Scott in Houston, and Scott asked Skjelbred for a price quote on pipe handling equipment.¹⁵ On March 19, 1996, Skjelbred sent a facsimile to Scott that included the Twin Ram Rig drawings that had been given to Smedvig on February 21, 1996.¹⁶

¹¹Id. at ¶ 5.

¹²Id.

¹³Deposition of Vidar Skjelbred, Exhibit 4 attached to Plaintiff Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 108, p. 13, and Exhibit 7 attached to GSF's Opposition to Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 114, p. 13.

¹⁴Id. at pp. 17-20, 143.

¹⁵Id. at pp. 42-46.

¹⁶Id. at pp. 46-47.

IV. Invalidity

GSF alleges that Transocean's claims are invalid as anticipated,¹⁷ derived,¹⁸ and obvious from the prior art.¹⁹

A. Presumptions and Burdens

Once issued "[a] patent shall be presumed valid . . . [and t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." 35 U.S.C. § 282. The presumption of validity is predicated on the acknowledged experience and expertise of the agency issuing the patent, and on "recognition that patent approval is a species of administrative determination supported by evidence." Ludlow Corp. v. Textile Rubber & Chemical Co., Inc., 636 F.2d 1057, 1059 (5th Cir. 1981). A party overcomes the presumption of validity only with clear and convincing evidence. American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1360 (Fed. Cir.), cert. denied, 105 S.Ct. 95 (1984). Clear and convincing evidence exists when the movant places in the mind of "the ultimate fact finder an abiding conviction that the truth of its factual contentions are

¹⁷See GSF's Opposition to Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 114.

¹⁸GSF's Opposition to Transocean's Motion for Partial Summary Judgment that Transocean's Invention was Not Derived from the Twin Ram Rig or the ME 5500, Docket Entry No. 115.

¹⁹See GSF's Motion for Partial Summary Judgment of Invalidity of Apparatus Claims, Docket Entry No. 93.

'highly probable.'" Colorado v. New Mexico, 104 S.Ct. 2433, 2437-2438 (1984). See also Buildex Inc. v. Kason Industries, Inc., 849 F.2d 1461, 1463 (Fed. Cir. 1988).

[T]he party asserting invalidity also bears the initial procedural burden of going forward to establish a legally sufficient *prima facie* case of invalidity. If this burden is met, the party relying on validity is then obligated to come forward with evidence to the contrary. Before rendering its judgment, the court must determine whether *all* of the evidence establishes that the validity challenger so carried his burden as to have persuaded the decision maker that the patent can no longer be accepted as valid.

Ralston Purina Co. v. Far-Mar-Co, Inc., 772 F.2d 1570, 1573 (Fed. Cir. 1985). Once a patent challenger has come forward with evidence establishing a *prima facie* case of invalidity, the patentee must produce sufficient rebuttal evidence to prevent the party challenging the patent's validity from meeting its burden of proving invalidity by clear and convincing evidence. See Lisle Corp. v. A.J. Mfg. Co., 398 F.3d 1306, 1316 (Fed. Cir. 2005). The burden of proof never shifts to the patent holder. T.P. Laboratories, Inc. v. Professional Positioners, Inc., 724 F.2d 965, 971 (Fed. Cir.), cert. denied, 105 S.Ct. (1984).

B. Anticipation

Transocean moves for summary judgment that neither the ME 5500 nor the Twin Ram Rig is prior art to its patented invention because GSF cannot produce clear and convincing evidence that they were known or used in the United States or described in a printed

publication before its invention date (Docket Entry No. 108). GSF responds that Transocean's motion should be denied because "the Twin Ram Rig and the ME5500 were sufficiently available to the interested public before Transocean's conception date."²⁰ Also pending before the court are cross-motions for partial summary judgment on the conception date of Transocean's patented invention. GSF argues that Transocean's conception date is May 3, 1996; Transocean argues that its invention date is February 2 or 8, 1996 (Docket Entry Nos. 89 and 97).²¹

1. Applicable Law

A patent cannot issue for an invention that is not new, but is instead, anticipated by the prior art. A patent claim is invalid by reason of anticipation if "the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent." 35 U.S.C. § 102(a). A single item of prior art is said to anticipate a patent claim if that item discloses, either expressly or inherently, all of the limitations of the claim. Schering Corp. v. Geneva Pharmaceuticals, Inc., 339 F.3d 1373, 1377-1379 (Fed. Cir. 2003).

²⁰Id. at p. 2.

²¹See GSF's Motion for Partial Summary Judgment Regarding Conception Date (Docket Entry No. 89), and Plaintiff Transocean's Response to and Cross-Motion for Partial Summary Judgment Concerning Conception (Docket Entry Nos. 96 and 97).

The disclosure must also be sufficient to enable one with ordinary skill in the art to practice the invention. Id. at 1380. Anticipation is a question of fact. Atofina v. Great Lakes Chemical Corp., 441 F.3d 991, 995 (Fed. Cir. 2006).

2. Analysis

(a) Known to Others in the United States or Described in a Printed Publication

Whether an asserted reference of prior art is known by others in the United States or described in a printed publication are legal conclusions based on factual determinations that require a case-by-case inquiry into the facts and circumstances surrounding the reference's disclosure to members of the public. See In re Klopfenstein, 380 F.3d 1345, 1350 (Fed. Cir. 2004); Cooper Cameron Corp. v. Kvaerner Oilfield Products, Inc., 291 F.3d 1317, 1321 (Fed. Cir. 2002) (citing Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 936 (Fed. Cir.), cert. denied, 111 S.Ct. 296 (1990)).

(1) **Additional Law**

For prior art to anticipate because it is known to others, the knowledge must have been available to the public in the United States. See Woodland Trust v. Flowertree Nursery, Inc., 148 F.3d 1368, 1370 (Fed. Cir. 1998). Although the "known . . . by others" provision does not require the anticipating public knowledge to be disclosed in a printed publication, see Ecolochem, Inc. v. Southern California Edison Co., 227 F.3d 1361, 1369 (Fed. Cir. 2000), cert.

denied, 121 S.Ct. 1607 (2001), knowledge that is kept confidential cannot anticipate a patented invention. See Woodland Trust, 148 F.3d at 1370-1371 (citing Coffin v. Ogden, 85 U.S. 120, 124-125 (1873) (accessible hence anticipating prior use); Gayler v. Wilder, 51 U.S. 477, 497-498 (1850) (nonaccessible hence nonanticipating prior use)).

The phrase "printed publication" used in § 102 means

that before the critical date the reference must have been sufficiently accessible to the public interested in the art; dissemination and public accessibility are the keys to the legal determination whether a prior art reference was "published."

In re Klopfenstein, 380 F.3d at 1348 (citing In re Cronyn, 890 F.2d 897, 1160 (Fed. Cir. 1986)). The relevant "public" consists of those individuals who would be interested in the invention or the relevant art. Cooper Cameron, 291 F.3d at 1324 (citing Garrett Corp. v. United States, 422 F.2d 874 (Ct.Cl. 1970)). A court should also consider whether the "printed publication" was the subject of confidentiality agreements or whether the disclosing party had "a reasonable expectation that the information [would] not be copied." In re Klopfenstein, 380 F.3d at 1351. "[P]rofessional or behavioral norms [that] entitle a party to a reasonable expectation that the information displayed will not be copied" can also be evidence that something is not a "printed publication." Id. Nevertheless, "[e]vidence of routine business practice can be sufficient to prove that a reference was made

accessible before a critical date." Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1569 (Fed. Cir.), cert. denied, 109 S.Ct. 228 (1988).

(2) Asserted Prior Art

(i) Maritime Engineering's ME 5500

Asserting that Fjoran created the ME 5500 brochure in Norway, gave the brochure to Smedvig in Norway on February 8 or 9, and gave the brochure to Transocean ASA in Norway on February 21, 2006, Transocean argues that it is entitled to judgment as a matter of law that the ME 5500 brochure is not prior art to its invention because GSF is unable to produce clear and convincing evidence that "creating and distributing two copies of the report in Norway establishes that the report was known or used in the United States."²² Asserting that the ME 5500 brochure was only given to a few clients, Transocean also argues that it is entitled to summary judgment that the ME 5500 is not prior art because the ME 5500 brochure is not a "printed publication" under 35 U.S.C. § 102(a).²³ GSF relies on Fjoran's testimony in support of its argument that Transocean's § 102(a) motion should be denied because the ME 5500 brochure was accessible "to the interested public – offshore drilling contractors – well before Transocean's

²²Plaintiff Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 108, p. 6.

²³Id. at pp. 6-8.

application date of May 3, 1996, if not as early as February 8, 1996."²⁴

Fjoran testified that he and his engineering team created the formal ME 5500 brochure on February 8, 1996, that the brochure includes earlier created drawings and a narrative description of the ME 5500's capabilities, and that he began to market the ME 5500 aggressively to potential customers as soon as the brochure was created.²⁵ Fjoran testified that he distributed the brochure to Smedvig, a Norwegian drilling company, on February 8 or 9, 1996, to Transocean ASA, a Norwegian drilling contractor, on February 21, 1996, to the predecessors of representatives of the parties to this action, Sonat and Global Marine, in their Texas offices between March 10 and 19, 1996, and to United States-based drilling contractors, Santa Fe and Diamond Offshore, and Italian drilling company, Saipem, around the same time.²⁶ Fjoran testified that he focused his marketing efforts on clients that he believed would most likely have been "interested in building a new rig and would have the financial means to build a rig that would likely cost \$200 million or more," and that he "would have given the brochure to any other interested parties who requested a copy with the hope that

²⁴GSF's Opposition to Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 114, p. 9.

²⁵Fjoran Declaration, Exhibit 1 attached to Docket Entry No. 114, ¶¶ 4-5.

²⁶Id. at ¶ 5.

they would be interested in purchasing the system."²⁷ GSF also cites the testimony of Mike Smith, who worked for broker R.S. Platou, as additional evidence that the United States-based companies that received the ME 5500 brochure, i.e., Sonat, Global Marine, Santa Fe, and Diamond Offshore, were among the few major drilling companies who, at the time, would have been interested in building a deepwater offshore rig requiring a \$200 million investment.²⁸

Since Transocean has not argued that the ME 5500 brochure was not "printed," the only issue is whether it was published, i.e., whether it was accessible to the interested public. See Cooper Cameron, 291 F.3d at 1234 ("reports need only be accessible to the interested public"). See also Garrett, 422 F.2d at 878 ("The public . . . constitutes that class of persons concerned with the art to which the document relates and thus most likely to avail themselves of its contents."). Fjoran testified that the brochure was used as a marketing tool, that he marketed the ME 5500 aggressively as soon as the brochure was completed, that he gave the brochure to offshore drilling companies that he considered most likely to be interested and able to make the \$200 million investment required by the ME 5500, and that the brochure would

²⁷Id.

²⁸Fjoran Declaration, Exhibit 1 attached to Docket Entry No. 114, ¶ 5; Smith Deposition, Exhibit 2 attached to Docket Entry No. 114, pp. 55-56, Ray Deposition, Exhibit 5 attached to Docket Entry No. 114, pp. 18-19.

have been given to anyone who asked for it. From this testimony a reasonable trier of fact could conclude that beginning on February 8 or 9, 1996, the ME 5500 brochure was distributed without restriction to offshore drilling contractors who, at the time, Maritime Engineering believed would have been interested and financially able to invest in the ME 5500. Accordingly, the court concludes that Fjoran's testimony is sufficient to raise a genuine issue of material fact concerning whether the brochure was "published," i.e., accessible to the interested public by February 8, 1996. See Garrett, 422 F.2d at 878 (distribution of report without restriction to six commercial companies held to constitute publication under § 102); Constant, 848 F.2d at 1569 (evidence of routine business practice can prove that a reference was accessible to the interested public). Since Fjoran also testified that beginning sometime between March 10 and 19, 1996, the brochure was given to United States-based companies, the court concludes that his testimony is also sufficient to raise a genuine issue of material fact as to whether the ME 5500 was publicly accessible and, therefore, known to others in the United States from that time.

(ii) Maritime Hydraulics' Twin Ram Rig

Citing the Skjelbred deposition Transocean argues that it is entitled to judgment as a matter of law that the Twin Ram Rig is not prior art to its patented invention because drawings of the

Twin Ram Rig given to Smedvig on February 21, 1996, were marked "confidential." Relying on the Skjelbred deposition and on evidence that drawings of the Twin Ram Rig were sent to entities other than Smedvig without notice of confidentiality and were included in a brochure distributed at the Offshore Technology Conference in May of 1996, GSF argues that Transocean's § 102(a) motion should be denied because "the drawings in the MH Twin Ram Rig brochure were sufficiently accessible to the interested public prior to May 3, 1996, and as early as February 22, 1996."²⁹

Since GSF does not dispute that the Twin Ram Rig drawings presented to Smedvig on February 21, 1996, were stamped "confidential," and were presented to Smedvig in Norway, and has not presented any evidence showing that Smedvig did not treat the drawings as confidential, GSF has presented no evidence from which a reasonable fact-finder could conclude that the Twin Ram Rig was publicly available, or from which the court could conclude that the Twin Ram Rig was known to others in the United States or described in a printed publication by February 22, 1996.

As evidence that Maritime Hydraulics did not treat the Twin Ram Rig drawings provided to Smedvig as confidential, GSF cites copies of the same drawings that were sent without notice of confidentiality to GVA on March 12, 1996. Since, however, the Declaration of Per Vatne, the Maritime Hydraulics employee who sent

²⁹GSF's Opposition to Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 114, p. 9.

the Twin Ram Rig drawings to GVA, shows that GVA is a Swedish company and that the Twin Ram Rig drawings sent to GVA on March 12, 1996, were sent to Sweden,³⁰ GSF has presented no evidence from which a reasonable fact-finder could conclude that the Twin Ram Rig drawings were publicly accessible in the United States by March 12, 1996, or from which the court could conclude that the Twin Ram Rig was known by others in the United States by that date. Since, moreover, GSF does not argue that the drawings provided to GVA were provided to any other entities or that they otherwise constitute a "printed publication," GSF has not presented any evidence from which a reasonable fact-finder could conclude that drawings of the Twin Ram Rig were accessible to the interested public by March 12, 1996, or from which the court could conclude that those drawings constitute a "printed publication" under 35 U.S.C. § 102(a).

As additional evidence that Maritime Hydraulics did not treat the Twin Ram Rig drawings as confidential, and as evidence that the drawings were known to others in the United States, GSF submits Skjelbred's testimony that he sent drawings of the Twin Ram Rig to Transocean inventor Robert Scott by facsimile on March 19, 1996,³¹ and submits a copy of that facsimile transmission.³² Although GSF argues that "several of the Twin Ram Rig drawings have no language

³⁰Declaration of Per Vatne, Exhibit 8 attached to Docket Entry No. 114, ¶ 6 and Exhibit B attached thereto.

³¹Skjelbred Deposition, Exhibit 7 attached to Docket Entry No. 114, pp. 46-47.

³²Exhibit 11 attached to Docket Entry No. 114.

regarding confidentiality,. . . and on the drawings that do have such language, the writing is so small as to be completely illegible,"³³ the word "confidential" is printed in the lower left hand corner of each page of the transmission, including the cover page. Moreover, GSF fails to cite any evidence – testimonial or otherwise – explaining why the notices of confidentiality that it admits do appear on at least some of the drawings included in the facsimile should be disregarded. Since knowledge that is kept confidential cannot anticipate a patented invention, Woodland Trust, 148 F.3d at 1370-1371, GSF has not presented any evidence that the Twin Ram Rig drawings provided to Scott on March 19, 1996, were publicly accessible in the United States by that date. Moreover, since the word "confidential" is printed in the lower left-hand corner of each page of the Twin Ram Rig brochure that GSF asserts was distributed at the Offshore Technology Conference in May of 1996, since GSF fails to cite any evidence – testimonial or otherwise – explaining why the notices of confidentiality contained in that brochure should be disregarded, and since GSF fails to cite any evidence showing when in May of 1996 the conference was held or the brochure distributed, the court is not persuaded that the brochure constitutes evidence capable of raising a genuine issue of material fact for trial regarding whether the Twin Ram Rig drawings were publicly available before May 3, 1996, as argued by GSF.

³³GSF's Opposition to Transocean's Motion for Partial Summary Judgment on Prior Art, Docket Entry No. 114, p. 8.

(3) Conclusions

GSF has cited evidence that the court concludes is sufficient to raise a genuine issue of material fact as to whether the ME 5500 brochure was "published," i.e., available to the interested public by February 8, 1996, and whether the ME 5500 was publicly accessible and, therefore, known to others in the United States from sometime between March 10 and 19, 1996. Since both these dates precede the May 3, 1996, application filing date and presumptive invention date of the '851 patent, the court is unable to decide whether either party is entitled to judgment as a matter of law on the ME 5500's status as anticipatory prior art under 25 U.S.C. § 102(a) without considering their dispute over the invention date of the patented claims. Since, however, the court concludes that GSF has not presented evidence capable of raising a genuine issue of material fact concerning the public availability of the Twin Ram Rig prior to May 3, 1996, the court concludes that Transocean is entitled to summary judgment that the Twin Ram Rig is not anticipatory prior art under § 102(a) because it was not described in a printed publication or known to others in the United States prior to the application filing date and presumptive invention date of the '851 patent.

(b) Conception Date

GSF moves for partial summary judgment that May 3, 1996, the application filing date for the '851 patent, is the "conception

date" for the claims that Transocean alleges it infringed (Docket Entry No. 89). In response Transocean moves for partial summary judgment that the invention date of its asserted claims is February 2, 1996, or alternatively, February 8, 1996 (Docket Entry No. 97). For the reasons explained below the court concludes that GSF's motion should be granted and Transocean's motion should be denied.

(1) Additional Law

In Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572 (Fed. Cir. 1996), a case that both parties cite in support of their conception date motions, the court stated that

[a]ny suggestion that a document is prior art because it appears before the filing date of a patent ignores the requirements of section 102(a). Section 102(a) explicitly refers to invention dates, not filing dates. Thus, under section 102(a), a document is prior art only when published before the invention date.

Id. at 1576. Thus, for the ME 5500 brochure to constitute prior art it must have been published before Transocean's invention date.

(i) Invention Date

An invention consists of two parts: (1) the mental part of the invention, known as the conception, and (2) the physical part of the invention, known as the reduction to practice. Conception and reduction to practice are questions of law predicated on subsidiary factual findings. Purdue Pharma L.P. v. Boehringer Ingelheim GMBH, 237 F.3d 1359, 1365 (Fed. Cir. 2001). "To antedate (or establish priority) of an invention, a party must show either

an earlier reduction to practice, or an earlier conception followed by a diligent reduction to practice." Id. (citing Price v. Symsek, 988 F.2d 1187, 1190 (Fed. Cir. 1993)).

Conception is the formation in the mind of the inventor of "a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Id. (quoting Burroughs Wellcome Co. v. Barr Laboratories, Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994), cert. denied, 116 S.Ct. 771 (1996)). Conception must include every feature or limitation of the claimed invention. Slip Track Systems, Inc. v. Metal-Lite, Inc., 304 F.3d 1256, 1263 (Fed. Cir. 2001) (citing Kridl v. McCormick, 105 F.3d 1446, 1449 (Fed. Cir. 1997)). See also Coleman v. Dines, 754 F.2d 353, 359 (Fed. Cir. 1985) ("in establishing conception a party must show possession of every feature recited in the count, and that every limitation of the count must have been known to the inventor at the time of the alleged conception"). "Conception is complete only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation." Burroughs, 40 F.3d at 1228.

Reduction to practice follows conception. See Mahurkar, 79 F.3d at 1578. Reduction to practice may be accomplished in two ways. One way is to make a physical embodiment that includes all of the limitations of the claimed invention. This is known as an

actual reduction to practice. See Medichem, S.A. v. Rolabo, S.L., 437 F.3d 1157, 1169 (Fed. Cir. 2006) (distinguishing between actual and constructive reduction to practice). A second way is to file a patent application disclosing the invention. This is known as a constructive reduction to practice. Id.

(ii) Priority

Resolution of the pending cross-motions turns on rules for establishing priority of invention borrowed from the interference context as well as on procedural rules regarding burdens of proof. Mahurkar, 79 F.3d at 1576. The basic rule for determining priority is set forth in 35 U.S.C. § 102(g), which provides

A person shall be entitled to a patent unless—

. . . before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

35 U.S.C. § 102(g)(2). Thus, in the United States, the person who first reduces an invention to practice is "prima facie the first and true inventor." Id. (citing Christie v. Seybold, 55 F. 69, 76 (6th Cir. 1893)). However, the person who first conceives, and, in a mental sense, first invents, "may date his patentable invention back to the time of its conception, if he connects the conception with its reduction to practice by reasonable diligence on his part,

so that [conception and reduction to practice] are substantially one continuous act." Id. (quoting Christie, 55 F. at 76). In other words, priority of invention "goes to the first party to reduce an invention to practice unless the other party can show that it was the first to conceive the invention and that it exercised reasonable diligence in later reducing that invention to practice." Price, 988 F.2d at 1190.

(iii) Corroboration

Since conception is the mental part of the invention, an inventor's testimony about when he conceived the invention, standing alone, is insufficient to prove conception. Mahurkar, 79 F.3d at 1577. Courts "require corroborating evidence of a contemporaneous disclosure that would enable one skilled in the art to make the invention." Burroughs, 40 F.3d at 1228 (citing Coleman, 754 F.2d at 359 ("Conception must be proved by corroborating evidence which shows that the inventor disclosed to others his 'completed thought expressed in such clear terms as to enable those skilled in the art to make the invention.'")). "This requirement arose out of a concern that inventors testifying in patent infringement cases would be tempted to remember facts favorable to their case by the lure of protecting their patent or defeating another's patent." Mahurkar, 79 F.3d at 1577 (citing Eibel Process Co. v. Minnesota & Ontario Paper Co., 43 S.Ct. 322, 327 (1923)). See also Kridl, 105 F.3d at 1450 ("[t]he purpose of

corroboration . . . is to prevent fraud, by providing independent confirmation of the inventor's testimony."). "The rule provides a bright line for both district courts and the PTO to follow in addressing the difficult issues related to invention dates." Id. Whether corroboration exists is a question of fact. Medichem, 437 F.3d at 1171. "This is true because 'issues of conception and reduction to practice are questions of law predicated on subsidiary factual findings,' . . . and corroboration is properly viewed as a subsidiary factual finding." Id. (citing Eaton v. Evans, 204 F.3d 1094, 1097 (Fed. Cir. 2000), and Singh v. Brake, 222 F.3d 1362, 1368 (Fed. Cir. 2000) (implying that corroboration is a question of fact by holding that "substantial evidence supports the Board's finding that this [notebook] entry alone was insufficient to corroborate Singh's testimony because while clearly articulating the problem, the entry did not provide the solution"))).

To assess the corroboration of oral testimony courts apply a rule of reason analysis. Mahurkar, 79 F.3d at 1577 (citing Price, 988 F.2d at 1195). Under the rule of reason analysis "[a]n evaluation of all pertinent evidence must be made so that a sound determination of the credibility of the inventor's story may be reached." Id. (quoting Price, 988 F.2d at 1195). If a party seeks to prove conception through the use of physical exhibits, courts do not require corroboration of the contents of the exhibits because the trier of fact, aided by testimony concerning what the exhibit

would mean to one skilled in the art, is capable of concluding for itself what the exhibits show. Id. See also Medichem, 437 F.3d at 1169-1170.

Although each case must be decided on its own facts, the determination of corroboration is not wholly unstructured because courts have provided guidance on the standards by which to judge whether an inventor's testimony has been sufficiently corroborated. Documentary or physical evidence that is made contemporaneously with the inventive process and disclosed to another provides the most reliable proof that the inventor's testimony has been corroborated. See Woodland Trust, 148 F.3d at 1373. Documentary or physical evidence created at the time of conception or reduction to practice eliminates the risk of litigation-inspired fabrication or exaggeration. Id. Circumstantial evidence about the inventive process, alone, may also corroborate. See Knorr v. Pearson, 671 F.2d 1368, 1373 (Cust. & Pat. App. 1982) ("[S]ufficient circumstantial evidence of an independent nature can satisfy the corroboration rule."). Additionally, oral testimony of someone other than the alleged inventor may corroborate an inventor's testimony. Woodland Trust, 148 F.3d at 1371.

(2) Analysis

To establish that Transocean's asserted claims are invalid because they were anticipated by the ME 5500, GSF must establish that the ME 5500 qualifies as anticipatory prior art under 35 U.S.C. § 102(a). At trial GSF will bear the burden of persuading

the fact-finder with clear and convincing evidence that the ME 5500 was known in the United States or that the ME 5500 brochure was published before the invention date of the patents-in-suit. If GSF fails to meet this burden, the ME 5500 cannot be anticipatory prior art under § 102(a). Mahurkar, 79 F.3d at 1577. Since the court has concluded that GSF has cited evidence sufficient to raise fact issues for trial as to whether the ME 5500 brochure was published on February 8, 1996, and whether the ME 5500 was publicly accessible and therefore known to others in the United States from sometime between March 10 and 19, 1996, and since these dates precede the application filing date and the presumptive invention date for the '851 patent, GSF has presented evidence capable of establishing a prima facie case of invalidity under § 102(a). Transocean now has the burden to produce evidence capable of preventing a reasonable fact-finder from concluding that GSF has established by clear and convincing evidence that the ME 5500 was known in the United States or the ME 5500 brochure was published before the invention of its patented claims. Id. at 1576-1577.

In its cross-motion for partial summary judgment Transocean contends that the invention date for its asserted claims is February 2 or 8, 1996, because inventor, Robert Herrmann, testified that he conceived the invention by those dates and then acted with reasonable diligence to reduce them to practice. Transocean also contends that Herrmann's testimony is corroborated by independent evidence consisting of preinvention documents, electronically dated drawings, and non-inventor testimony.

GSF argues that it is entitled to judgment as a matter of law that the invention date for Transocean's asserted claims is May 3, 1996, the application filing and presumptive invention date of the '851 patent because Herrmann's own testimony establishes that he had not conceived all the elements of the invention embodied by the asserted claims by February 2, 1996, and because Transocean has failed to proffer any legally sufficient evidence to show conception prior to May 3, 1996.³⁴

(i) February 2, 1996

GSF argues that the October 19, 2005, deposition testimony of inventor, Robert Herrmann, forecloses as a matter of law, Transocean's attempt to establish February 2, 1996, as the conception date for its asserted claims because Herrmann admitted that he had not conceived of all the elements protected by the patents-in-suit by that date:

Q. So it was your position that on February 2 you conceived of all the elements of all the claims that are covered in the patents?

A. No, no, no, no. I don't - it's my position that on the 2nd of February we came up with the idea that eventually resulted in all of this stuff.³⁵

GSF argues that "the 'idea that eventually resulted in all of this stuff' is legally insufficient to constitute conception," because

³⁴GSF's Motion for Partial Summary Judgment Regarding Conception Date, Docket Entry No. 89, p. 4.

³⁵Id. (citing Deposition of Robert Hermann, attached to GSF's Reply to Its Motion for Partial Summary Judgment Regarding Conception Date, Docket Entry No. 99, p. 71:7-13).

conception must encompass all limitations of the claimed invention.³⁶

Transocean responds that

GSF relies on Herrmann's deposition testimony to challenge conception, but the testimony does not address the few claims asserted. . . . Herrmann testified that he did not conceive of "all the elements of all the claims that are covered in the patents." . . . The four Transocean patents contain over 100 claims related to different configurations and processes generally related to dual activity, but not necessarily identical to the original conception. . . . Herrmann and the other inventors developed these specific configurations and processes over the next few days and weeks. GSF counsel never asked Herrmann for his conception dates for the five claims currently asserted in this case. Accordingly, the cited testimony [from Herrmann's deposition] cannot contradict the attached declaration of Herrmann. Accordingly, the declaration establishes an uncontroverted conception date of February 2, 1996 for the five asserted claims.³⁷

Transocean also submits a declaration executed by Herrmann on April 10, 2006, in which Herrmann asserts, "I first conceived of the invention for drilling a single well from a single derrick with two drilling stations, by February 2, 1996."³⁸ Transocean argues that in the declaration "Herrmann identifies the elements of the five remaining claims as part of his original conception."³⁹

³⁶Id.

³⁷Transocean's Cross-Motion, Docket Entry No. 97, p. 9.

³⁸Declaration of Robert Herrmann included in Docket Entry No. 98, ¶ 8.

³⁹Transocean's Cross-Motion, Docket Entry No. 97, p. 9
(citing Declaration of Robert Herrmann, included in Docket Entry
(continued...))

Although GSF's counsel may not have asked Herrmann about conception dates for the five specific claims that Transocean now says are being asserted in this case, GSF's counsel did ask Herrmann to describe his ideas as they existed on February 2, 1996:

Q. When you claim on February 2nd that you came up with the idea of working simultaneously on a single well, what sort of operations would each of the strings have been doing on that single well?

A. Okay. Again, we came up with the concept that led to things like working on – and the concept had two work stations and a well. The low hanging fruit was running the BOP while you were doing the top hole. That was – but it just kind of steamrolled from there. I mean, once you saw what other opportunities you had, you could extrapolate that to running casing or the other things.

Q. So on February 2nd when you were talking about what this – your ideas about what the two strings would be doing, was: One would be drilling top hole while the other would be running the BOP?

A. Well, like I say, February 2nd we came up with this concept, if we had a dual derrick and we could do this kind of well construction, and from there the idea developed. **I can't say for sure what exactly – which elements we had identified exactly on February 2nd, but I could say for sure – I'm pretty sure – that on February 2nd the concept of the two derrick – dual derrick work station commonality and – that could be used on one well was – was developed, just the basic idea.**

Q. Over what period of time did these other uses for this two drill string under one derrick rig develop?

A. Well, it would be – I can't say for sure, but it would be – over the next, you know, few days we were running with it.⁴⁰

³⁹(...continued)
No. 98).

⁴⁰Herrmann Deposition, attached to GSF's Reply to Its Motion
(continued...)

Herrmann's deposition testimony is not sufficient to satisfy Transocean's burden of production because it fails to show that he had conceived all the limitations of the asserted claims by February 2, 1996, and any statements to the contrary contained in Herrmann's declaration are insufficient to satisfy Transocean's burden of production, because it is well settled that a party cannot defeat a motion for summary judgment using an affidavit that impeaches, without explanation, sworn testimony. See Gemmy Industries Corp. v. Chrisha Creations Ltd., 452 F.3d 1353, 1359 (Fed. Cir. 2006). See also Bazan ex rel. Bazan v. Hidalgo County, 246 F.3d 481, 487 (5th Cir. 2001).

"[T]he test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention." Burroughs, 40 F.3d at 1228. "An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue." Id. (citing Fiers v. Revel, 984 F.2d 1164, 1169 (Fed. Cir. 1993)). "Conception is complete only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation." Id. "[I]n establishing conception a party must show possession of every feature recited in the count, and that every limitation of the count must have been known to the inventor

⁴⁰(...continued)
for Partial Summary Judgment Regarding Conception Date, Docket Entry No. 99, pp. 71-73.

at the time of the alleged conception." Coleman, 754 F.2d at 359. See also Slip Track, 304 F.3d at 1263 (conception must include every feature or limitation of the claimed invention).

Since Herrmann testified that by February 2, 1996, "just the basic idea" of the invention – "two work stations and a well" – had been conceived, and also testified that he could not say for sure what, if any, other elements of the invention were conceived by that date, no reasonable fact-finder could conclude from his testimony that every feature of either the claimed invention – or even just the five claims now being asserted – were conceived by February 2, 1996, or that by that date the asserted claims were so clearly defined in Herrmann's mind that only ordinary skill would be necessary to reduce those claims to practice. As explained in Burroughs, 40 F.3d at 1228,

[t]he conception analysis necessarily turns on the inventor's ability to describe his invention with particularity. Until he can do so, he cannot prove possession of the complete mental picture of the invention. These rules ensure that patent rights attach only when an idea is so far developed that the inventor can point to a definite, particular invention.

Herrmann's testimony that by February 2, 1996, "just the basic idea," i.e., the concept of two derricks and a well, had been conceived demonstrates that Herrmann could not describe his invention with particularity by February 2, 1996. Although Transocean cites Herrmann's declaration as evidence that he "first conceived of the invention for drilling a single well from a single

derrick with two drilling stations, by February 2, 1996,"⁴¹ this declaration is conclusory and is not supported by statements contained in the declaration.

Transocean acknowledges that each of its asserted "claims require equipment to transfer pipe between the two [drill] stations."⁴² But Herrmann explains that after he described his basic idea to his co-inventors in the week following February 2, 1996, they then spent "the next several weeks" evaluating "different layouts and equipment" before they decided "to use two pipe handlers mounted on rail that extended between the drill stations."⁴³ This evidence coupled with the assertion of Transocean's counsel that "Herrmann and the other inventors developed these specific configurations and processes over the next few days and weeks,"⁴⁴ precludes the court from determining as a matter of law that February 2, 1996, was the conception date for those claims. See Burroughs, 40 F.3d at 1228 ("An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue.").

⁴¹Herrmann Declaration included in Docket Entry No. 98, ¶ 8.

⁴²Transocean's Cross-Motion, Docket Entry No. 97, p. 5.

⁴³Herrmann Declaration included in Docket Entry No. 98, ¶ 12.

⁴⁴Transocean's Cross-Motion, Docket Entry No. 97, p. 9.

(ii) February 8, 1996

Transocean argues that a conception date of February 8, 1996, is established as a matter of law by drawings that "go beyond mere corroboration, and virtually establish conception alone."⁴⁵ Transocean's argument for a conception date of February 8, 1996, rests on two computer sketches.⁴⁶ Although Transocean asserts that these two sketches were made by Herrmann before February 8, 1996, the drawings themselves bear no indication of who made them or when. The only evidence of authorship is Herrmann's testimony that he made the sketches on his computer at work and at home, and that they came from his floppy disks.⁴⁷ The only evidence of the date on which the drawings were created is Herrmann's statement that

[e]ach of the drawing files on the disks have a "Last Modified Date" in the electronic directory showing the last time the drawing was changed. The floppy disks do not contain the create date for such file. I understand from Transocean counsel that the operating system I used in 1996 did not store create date information for files created by my drawing program. All of the drawings referenced in this declaration were created by me before the "Last Modified Date" in the directory.⁴⁸

Transocean has not presented any evidence that Herrmann's drawings were contemporaneously disclosed to or witnessed by anyone else.

While the drawings themselves do not require corroboration, Mahurkar, 79 F.3d at 1577, Herrmann's testimony that he created the

⁴⁵Id. at p. 18.

⁴⁶See Exhibits 10 and 12 included in Docket Entry No. 98.

⁴⁷Herrmann Declaration, included in Docket Entry No. 98, ¶ 14.

⁴⁸Id. at ¶ 15.

drawings and that he created them before February 8, 1996, does require corroboration. See Burroughs, 40 F.3d at 1228 (citing Coleman, 754 F.2d at 359 ("Conception must be proved by corroborating evidence which shows that the inventor disclosed to others his 'completed thought expressed in such clear terms as to enable those skilled in the art to make the invention.")). Transocean does not cite and the court has not found any authority supporting its contention that the testimony of an inventor together with his own undisclosed and unwitnessed drawings is sufficient to create a genuine issue of material fact as to when conception occurred. On the contrary, relevant case law unequivocally holds that "an inventor's own unwitnessed documentation does not corroborate an inventor's testimony about inventive facts." Brown v. Barbacid, 276 F.3d 1327, 1335 (Fed. Cir. 2001).

GSF argues that "consistent with Mr. Herrmann's testimony, when Transocean's conception proof is compared to each asserted claim, it is clear that Transocean has no evidence of the conception of each element of each claim by February 2 or February 8, 1996."⁴⁹ In a claim-by-claim analysis that remains unrebutted by Transocean, GSF argues that Hermann's drawings do not depict a transferring means as required by claims 10, 11, 17, and

⁴⁹GSF's Reply to Its Motion for Partial Summary Judgment Regarding Conception Date, Docket Entry No. 99, p. 6.

20, and do not depict two drilling stations working on a single well as required by claims 10, 20, and 23.⁵⁰

Transocean is currently pursuing five claims against GSF: two apparatus claims (claim 11 of the '781 patent and claim 17 of the '069 patent); and three method claims (claim 23 of the '071 patent, claim 10 of the '069 patent, and claim 20 of the '781 patent). Transocean acknowledges that each of its asserted claims requires equipment to transfer tubulars between the two work stations.⁵¹ Moreover, claim 11 of the '781 patent expressly provides that the means for transferring includes two pipe handling apparatuses mounted on a rail assembly.⁵² Yet, Herrmann states in his declaration that

[t]he sketch of Exhibit 10 does not show the equipment used to transfer pipe between the main and auxiliary rig through the common set back area, but I would have considered different ways of transferring vertical pipe on the drill floor by February 6, 1996 – the last modified date of Exhibit 10. . . . Although I knew of some of the available concepts to transfer pipe, we did not know the best floor arrangement and equipment design to use. Bob Scott, Don Ray, and I evaluated different designs over the next few weeks. We ultimately decided to use two pipe handlers mounted on a rail between the drilling stations. However, I knew by February 6, 1996, that using pipe handlers was an option along with other configurations for transferring.

⁵⁰Id. at pp. 6-8.

⁵¹Transocean's Cross-Motion, Docket Entry No. 97, p. 5. See also, e.g., Transocean's Motion for Partial Summary Judgment that Transocean's Invention was Not Derived from Either Maritime Hydraulics' Twin Ram Rig or Maritime Engineering's ME 5500 Brochure, Docket Entry No. 106, p. 3.

⁵²See '781 Patent, Exhibit 25 included in Docket Entry No. 98.

. . .

Exhibit 12 contains . . . two set back areas between the two drill stations marked for reference as A and B. In this set up, we intended to use a bridge crane (not shown) to move casing stands in and out of the A and B set back areas.⁵³

These statements in Herrmann's declaration prove that the drawings on which Transocean relies to establish conception by February 8, 1996, do not disclose the pipe handling element of the asserted claims. Moreover, Herrmann's description of the drawings establishes that the decision to use two pipe handlers mounted on a rail between the two drilling stations as required by claim 11 of the '781 patent was not made until weeks after completion of the drawings on which Transocean relies to establish conception.

Transocean also acknowledges that each of its asserted claims is directed to conducting simultaneous drilling and auxiliary drilling operations [on a single well]. Yet, Herrmann states in his declaration that

[t]he drawing of Exhibit 10 does not show the single well because the picture does not show the sea floor. I know that the two drill stations were intended to work on one well because we were focused on developing an exploration rig. Exploration rigs drill one well at a time. . . . As part of Project Enterprise, we modeled drilling a single well and evaluated ways to improve the efficiency of the well.⁵⁴

This statement in Herrmann's declaration proves that the drawings on which Transocean relies to establish conception do not disclose

⁵³Herrmann Declaration, included in Docket Entry No. 98, ¶¶ 21-23.

⁵⁴Id. at ¶ 20.

simultaneous drilling and auxiliary operations being conducted on a single well. Moreover, Transocean fails to cite any evidence that corroborates Herrmann's statement that such an understanding is implied either because he was focused on developing an exploration rig, or because exploration rigs only work on one well at a time.

Herrmann's statements -- that the drawings on which Transocean relies to establish a conception date of February 8, 1996, do not disclose either the pipe handling element or the conduct of simultaneous drilling operations on a single well element of the asserted claims -- preclude a reasonable fact-finder from concluding either that the drawings disclose each element of the asserted claims or that each element of the asserted claims was conceived by February 8, 1996. Herrmann's statements about the drawings also preclude the court from determining as a matter of law that February 8, 1996, was the conception date for the asserted claims. See Burroughs, 40 F.3d at 1228 ("An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue.").

(iii) Corroborating Evidence

In addition to the drawings discussed above, Transocean contends that its asserted conception dates of February 2 or 8, 1996, are corroborated by circumstantial evidence consisting of preinvention documents, co-worker testimony, and disclosures made

to Transocean's patent attorney.⁵⁵ Whether viewed individually or as a whole, Transocean's circumstantial evidence corroborates only Herrmann's testimony that "just the basic idea" of the invention had been conceived by February 2, 1996.

(A) Preinvention Documents

Citing Herrmann's declaration, Transocean argues that before Herrmann conceived his idea for dual activity drilling, Transocean assigned inventors to Project Enterprise and tasked them with creating a more efficient drilling rig, Transocean hired Herrmann to work on Project Enterprise, and Herrmann conceived and developed the invention that embodies the asserted claims as part of Project Enterprise.⁵⁶ As corroboration for Herrmann's description of Project Enterprise and his contribution to it, Transocean cites a status report written by Bob Scott on January 29, 1996, that lists four project categories: well process, rig and equipment design, personnel and training, and financial.⁵⁷ Under the "Rig and Equipment Design" heading the status report states, "[a]ny changes to rig design, existing equipment, new equipment, other industry spin-offs, that can increase the efficiency of the operation."⁵⁸

⁵⁵Transocean Cross-Motion, Docket Entry No. 97, p. 10.

⁵⁶Id. at pp. 10-11 (citing Herrmann Declaration, ¶¶ 2-3).

⁵⁷Id. (citing Interoffice Memo, Exhibit 3 included in Docket Entry No. 98).

⁵⁸Interoffice Memo, Exhibit 3 included in Docket Entry

While project mission statements and problem definitions can constitute circumstantial evidence capable of corroborating an inventor's testimony on conception, see Price, 988 F.2d at 1196, Transocean fails to cite any evidence showing that the mission statement or problem definition for Project Enterprise, i.e., to "increase the efficiency of the operation," would necessarily have led either to the conception of all the elements of the claimed invention or to the conception of all these elements by February 2 or 8, 1996. Moreover, since the January 29, 1996, status report fails to mention Herrmann, his participation in Project Enterprise, or any of his ideas, it does no more than identify January 29, 1996, as a terminus post quem date for his conception of the elements embodied by the asserted claims. At best Scott's project memo states a goal that Herrmann hoped to achieve, i.e., increased efficiency of rig operation. See Singh, 317 F.3d at 1341 (evidence that a problem has been defined does not corroborate inventor's testimony as to conception absent a solution to the problem).

(B) Co-Worker Testimony

Transocean contends that Herrmann's co-worker, Jarrell Matkins, "corroborates the sequence of events and substance of Herrmann's initial disclosure of the dual activity invention. Matkins does not remember the date of February 2, but sufficiently corroborates the time line of events when considered with the

⁵⁸(...continued)
No. 98.

documentary evidence.”⁵⁹ Although Transocean argues that Herrmann disclosed the invention to Jarrell Matkins on February 2, 1996, Matkins can only recall that he and Herrmann discussed the concept of two drill strings working simultaneously on a single well sometime before April of 1996.⁶⁰ Matkins testified that he and Herrmann worked together with several other people in a large workroom, that the workroom had a white drawing board, and that during their discussion Herrmann drew a simple picture on the white board showing a ship with two drill strings working on a single well.⁶¹ Although Transocean argues that Herrmann’s use of a white board to draw a picture for Matkins establishes that their discussion must have occurred on February 2, 1996, because it must have occurred before Herrmann started to make formal, computer-based drawings of his concept,⁶² Matkins did not testify that the discussion occurred before Herrmann had made formal drawings, and Transocean has not presented any evidence from which a reasonable fact-finder would draw that conclusion from Matkins’ testimony.⁶³

⁵⁹Transocean Cross-Motion, Docket Entry No. 97, pp. 1 and 15.

⁶⁰Deposition of Jarrell Matkins, included in Docket Entry No. 98, pp. 76, 80-81.

⁶¹Id. at pp. 80-83.

⁶²Transocean Cross-Motion, Docket Entry No. 97, p. 15 (citing Matkins Deposition, pp. 81-83).

⁶³Matkins Deposition, included in Docket Entry No. 98,
(continued...)

Moreover, Matkins' testimony makes clear that when his discussion with Herrmann occurred, Herrmann had not conceived all the elements of the asserted claims.

Q. Have you described the entirety to the best of your recollection exactly what that conversation entailed?

A. Yes.

Q. And did Mr. Herrmann talk about topdrives in that conversation?

A. I don't remember. I don't recall.

Q. Do you remember him talking about drawworks?

A. No.

Q. Quantities of drawworks?

A. No.

Q. Quantities of topdrives?

A. No.

Q. Pipe handling equipment?

A. No.

Q. Types of equipment, pipe handling equipment?

A. No.

. . .

Q. So when you had this discussion where he did a drawing . . . sometime before April of 1996, the concepts were still progressing?

A. Yes.⁶⁴

⁶³(...continued)
pp. 80-83.

⁶⁴Id. at pp. 91-93.

Since Matkins testified that he could only remember that his discussion occurred before April of 1996, his testimony does no more than identify April of 1996 as a terminus ante quem date for Herrmann's disclosure of an idea for using two drill strings to work simultaneously on a single well. Moreover, since Matkins testified that Herrmann told him about an idea to use two drill stations to work simultaneously on a single well, that he could not remember what, if anything, Herrmann had told him about the use of top drives, drawworks, or pipehandling equipment, and that the concept was still progressing when the discussion occurred, no reasonable fact-finder could conclude from Matkins' testimony that Herrmann had conceived all the elements of the asserted claims regardless of when the discussion occurred. Accordingly, the court concludes that Matkins' testimony does not provide independent corroboration for a conception date of February 2 or 8, 1996.

(C) Disclosure to Patent Attorney

Finally, Transocean argues that its "inventors disclosed their invention to their patent attorney, Brad Kile, on February 23, 1996, just three weeks after the conception date. The inventors used drawings and disclosed key concepts of the invention to Kile for a patent application."⁶⁵ Since the meeting with Kile did not take place until February 23, 1996, even assuming without deciding

⁶⁵Transocean Cross-Motion, Docket Entry No. 97, p. 16 (citing Declaration of Bradford Kile included in Docket Entry No. 98, ¶¶ 5-12, and Exhibit 40 also included in Docket Entry No. 98).

that Transocean's inventors disclosed the complete and operative invention to Kile on February 23, 1996, such disclosure fails to corroborate Transocean's asserted conception dates of February 2 or 8, 1996. Recognizing this Transocean argues that "[t]he invention disclosure alone may not corroborate the February 2 conception date, but Kile offers further and consistent support for a sequence of events that corroborate and point to an invention date of February 2, 1996."⁶⁶ Citing Mahurkar, 79 F.3d at 1578-1579, and Loral Fairchild Corp. v. Matsushita Elec., 266 F.3d 1358, 1364 (Fed. Cir. 2001), Transocean argues that the court should deny GSF's motion for partial summary judgment "based on the numerous documents, testimony from Matkins and Kile, and the circumstances surrounding the invention."⁶⁷

In Mahurkar a patentee relied on the inventor's testimony, his confidential disclosures to others, and his purchase of materials needed to practice and test the invention to establish the invention's actual reduction to practice. In Loral Fairchild a patentee similarly relied on the inventor's affidavit, testimony from one of the inventor's co-workers, and a proposal submitted to the United States Air Force to establish the invention's reduction to practice. 266 F.3d at 1363. The co-worker saw the inventor receive material for the invention, and the proposal stated that

⁶⁶Id. at p. 16.

⁶⁷Id. at p. 20.

"the claimed process 'is already showing reliable performance and high yield.'" Id. In both cases the Federal Circuit held that the evidence was sufficient to establish reduction to practice.

Since both Mahurkar and Loral Fairchild concern the sufficiency of the evidence needed to corroborate reduction to practice and not conception, the court is not persuaded that either is apposite to the issue now before the court. Both cases are also distinguishable by the fact that the sufficiency of the corroborating evidence, not the sufficiency of the inventor's assertion of reduction to practice, was at issue. Although the rule of reason requires corroborating evidence to be considered cumulatively and not in isolation, regardless of whether it is evaluated in whole or in part, none of the evidence cited by Transocean corroborates Herrmann's conclusory assertion that he conceived the claimed invention on February 2, 1996, or that by February 8, 1996, he had created drawings disclosing it.

(3) Conclusions as to Conception Date

The court has already concluded that GSF has cited evidence sufficient to raise fact issues for trial as to whether the ME 5500 brochure was published by February 8, 1996, and whether the ME 5500 was known in the United States by March 19, 1996. Since both of these dates are before the application filing date and the presumptive invention date for the '851 patent, the court has also concluded that GSF has presented evidence capable of establishing

a prima facie case of invalidity under § 102(a). Transocean now has the burden to produce sufficient rebuttal evidence to prevent a reasonable fact-finder from concluding that GSF has established by clear and convincing evidence that the ME 5500 brochure was published, or the ME 5500 was known in the United States before the invention of its patented claims.

To satisfy this burden Transocean argues that the ME 5500 cannot be anticipatory prior art to its invention because its inventors conceived the invention embodied by the patents-in-suit by February 2 or 8, 1996, and acted with reasonable diligence to reduce their conception to practice by filing the '851 patent application. The evidence presented is that Transocean tasked its Project Enterprise inventors with the goal of increasing the efficiency of the drilling operation, that Herrmann was a Project Enterprise inventor, that by February 2, 1996, Herrmann had conceived "just the basic idea" of using two drill strings to work simultaneously on a single well, that the next day he began to produce drawings that illustrated his idea, that the drawings he had created by February 8, 1996, did not depict all of the elements of either the patents-in-suit or the five claims that Transocean is currently asserting against GSF, and that Herrmann and his co-inventors spent the next several weeks evaluating different layouts and equipment before they decided to use two pipe handlers mounted on a rail that extended between the drill stations.

As corroboration for Herrmann's testimony, Transocean presents evidence that Transocean initiated Project Enterprise to increase the efficiency of its drilling operations, that on February 23, 1996, Transocean's inventors met with its patent attorney, and that sometime before April of 1996 Herrmann discussed his idea of using two drill strings to work simultaneously on a single well with a co-worker, but that during that discussion Herrmann said nothing about the equipment that would be used to effect the idea. No reasonable fact-finder could conclude from this evidence that by February 2 or 8, 1996, Herrmann had conceived "a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Burroughs, 40 F.3d at 1228. The court therefore concludes that Transocean has failed to carry its burden to produce evidence capable of preventing a reasonable fact-finder from concluding that GSF has established by clear and convincing evidence that the ME 5500 brochure was published, or the ME 5500 was known in the United States before the invention of its patented claims. Absent such evidence, the court concludes that Transocean's invention date is May 3, 1996, the application filing and presumptive invention date of the '851 patent. Accordingly, the court concludes that GSF's motion for partial summary judgment on conception date (Docket Entry No. 89) should be granted, and that Transocean's motion for partial summary judgment on conception date (Docket Entry No. 97) should be denied.

3. Conclusions as to Prior Art

Since the court has concluded that Transocean's invention date is May 3, 1996, and since that invention date is later than the dates for which the court has concluded that GSF has raised fact issues as to whether the ME 5500 brochure was published (February 8, 1996), or known to others in the United States (between March 10 and 19, 1996), the court concludes that Transocean's motion for partial summary judgment that the ME 5500 is not anticipatory prior art under 35 U.S.C. § 102(a) should be denied. Since the court has already concluded that Transocean is entitled to judgment as a matter of law that the Twin Ram Rig is not prior art to its invention under 35 U.S.C. § 102(a), Transocean's motion for partial summary judgment on prior art (Docket Entry No. 108) will be granted in part and denied in part.

C. Derivation

Transocean moves for partial summary judgment that its invention was not derived from the Twin Ram Rig or the ME 5500 (Docket Entry No. 106). Transocean contends that it is entitled to judgment as a matter of law against GSF's invalidity defense based on derivation from the Twin Ram Rig and the ME 5500 "because GSF cannot establish that anyone disclosed the[se] invention[s] to the Transocean inventors prior to [its] conception date."⁶⁸ Transocean

⁶⁸Plaintiff Transocean's Motion for Partial Summary Judgment that Transocean's Invention was Not Derived from Either the Maritime Hydraulics' Twin Ram Rig or Maritime Engineering's
(continued...)

also argues that its invention could not have been derived from the ME 5500 because "the ME 5500 is different from Transocean's dual activity invention."⁶⁹ GSF responds that Transocean's motion should be denied because "[i]t is undisputed that the . . . Twin Ram Rig and the . . . ME 5500 . . . were conceived and communicated to Transocean's inventors well before Transocean filed its patent application on May 3, 1996,"⁷⁰ and because GSF has presented evidence from which a fact-finder could find derivation.⁷¹

1. Applicable Law

A person is not entitled to a patent if "he did not himself invent the subject matter sought to be patented." 35 U.S.C. § 102(f). An inventor of a patent is not the true inventor if he "derived" the invention from someone else. Derivation is a question of fact. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1576 (Fed. Cir. 1997) (citing Price, 988 F.2d at 1190). To establish derivation the party asserting invalidity must prove both prior conception of the invention by another and communication

⁶⁸(...continued)
ME 5500 Brochure (Transocean's Derivation Motion), Docket Entry No. 106, p. 1.

⁶⁹Id. at p. 6.

⁷⁰GSF's Opposition to Transocean's Motion for Partial Summary Judgment that Transocean's Invention was Not Derived from the Twin Ram Rig or the ME 5500 (GSF's Opposition to Transocean's Derivation Motion), Docket Entry No. 115, p. 2.

⁷¹Id. at p. 1.

of that conception to the patentee "sufficient to enable [the patentee] to construct and successfully operate the invention." International Rectifier Corp. v. IXYS Corp., 361 F.3d 1363, 1376 (Fed. Cir. 2004) (citing Gambro Lundia, 110 F.3d at 1577). Conception must include every feature or limitation of the claimed invention. Slip Track Systems, 304 F.3d at 1263.

2. Analysis

(a) Maritime Hydraulics' Twin Ram Rig

Asserting that on March 19, 1996, Vidar Skjelbred, a Maritime Hydraulics representative, sent a facsimile that included drawings of the Twin Ram Rig to Transocean inventor Bob Scott, Transocean argues that the facsimile cannot be prior art for the purposes of showing derivation under 35 U.S.C. § 102(f) because Transocean inventor Bob Herrmann conceived of the Transocean invention on February 2, 1996, because Scott disclosed Transocean's invention to Maritime Hydraulics in a meeting with Skjelbred held around March 7, 1996, and because GSF can present no evidence that Transocean actually derived any part of its invention from the Maritime Hydraulics Twin Ram Rig.⁷²

(1) Prior Conception

Since the court has already rejected Transocean's assertion of a February 2 or 8, 1996, conception date for Transocean's

⁷²Id. at p. 5.

invention, and has concluded that GSF is entitled to judgment as a matter of law that Transocean's conception date is May 3, 1996, Transocean is not entitled to judgment as a matter of law on GSF's derivation defense on grounds that its invention was conceived before March 19, 1996, when Skjelbred sent the facsimile with the Twin Ram Rig drawings to Scott.

(2) Communication

Citing the Skjelbred deposition, Transocean argues that GSF can present no evidence that Transocean derived any part of its invention from the Twin Ram Rig because Transocean's inventor Bob Scott disclosed its dual activity invention to Skjelbred in a meeting around March 7, 1996, for the purpose of receiving a quote for pipe-handling equipment.⁷³ Since the Skjelbred-Scott meeting took place almost two weeks before Skjelbred's facsimile to Scott, Transocean argues that the facsimile cannot be prior art for the purposes of showing derivation under 35 U.S.C. § 102(f). Citing Robert Scott's deposition testimony, GSF argues that

[i]t is undisputed that [the Twin Ram Rig] drawings show a rig using two drilling stations to perform simultaneous operations to the seabed on a single well. . . . The drawings also show the transfer of tubulars between the two drilling stations. . . . As Transocean inventor Scott has admitted, . . . [these drawings] of the operation

⁷³Transocean's Motion on Derivation, Docket Entry No. 106, p. 5 (citing Skjelbred Deposition, Exhibit 2 included in Docket Entry No. 107, pp. 37-38).

necessitate the transfer of the section of tubulars between the two drilling stations.⁷⁴

GSF asserts that the "Twin Ram Rig embodies Transocean's invention and was conceived prior to Transocean's invention."⁷⁵

Skjelbred testified that he met with Transocean's inventor, Scott, during a trip to Houston that took place between March 4 and 14 of 1996, and that during that meeting he and Scott discussed not only a pipe handling system for Transocean, but also "the dual activity Ram Rig that [Maritime Hydraulics was] working on for Smedvig."⁷⁶ Skjelbred testified that on March 19, 1996, he sent a facsimile to Scott that included drawings of the Twin Ram Rig that had been completed on February 20, 1996, for Smedvig.⁷⁷ Since Transocean acknowledges that each of its asserted claims includes two drill strings capable of conducting simultaneous operations on a single well and that each of its claims require equipment to transfer tubulars between the two work stations,⁷⁸ and since Transocean does not argue that the drawings it received from

⁷⁴GSF's Opposition to Transocean's Derivation Motion, Docket Entry No. 115, p. 6 (citing Scott Deposition, Exhibit 5 attached thereto, p. 161).

⁷⁵Id.

⁷⁶Skjelbred Deposition at p. 46 (Exhibit 7 attached to Docket Entry No. 115).

⁷⁷Id. at pp. 13-26.

⁷⁸Transocean's Motion on Derivation, Docket Entry No. 106, p. 6. See also Transocean's Cross-Motion, Docket Entry No. 97, p. 5.

Skjelbred would not have enabled one of ordinary skill in the art to construct and successfully operate its claimed invention, the court concludes that Transocean is not entitled to judgment as a matter of law on GSF's derivation defense on grounds that the Twin Ram Rig reference was not communicated to it.

(b) Maritime Engineering's ME 5500

Transocean argues that the ME 5500 cannot be prior art for purposes of establishing derivation under 35 U.S.C. § 102(f) regardless of when it was disclosed to Transocean because the ME 5500 is materially different from Transocean's apparatus claims.⁷⁹ Transocean asserts that the ME 5500 discloses an apparatus with two separate derricks that does not disclose the ability to transfer tubulars between the derricks, while its apparatus claims disclose two well centers located under a single derrick that requires the ability to transfer tubulars between the two well centers.⁸⁰ Transocean's argument raises the question of whether Maritime Hydraulic's conception includes all the limitations of the asserted apparatus claims.

Asserting that claim 11 of the '781 patent is the only alleged claim that requires two well centers under a single derrick, GSF argues that since the ME 5500 is a rig with two drilling stations that are capable of working simultaneously on a single well, "[t]he

⁷⁹Id. at pp. 6-7.

⁸⁰Id.

ME 5500 embodies at least the inventions covered by some of Transocean's claims and makes other claims obvious. For instance, ME 5500 documents in Transocean's files disclose at least two examples of two drill centers working on a single well."⁸¹

Transocean has stated that it is now asserting only five claims against GSF: two apparatus claims -- claim 11 of the '781 patent and claim 17 of the '069 patent; and three method claims -- claim 23 of the '071 patent, claim 10 of the '069 patent, and claim 20 of the '781 patent. Although claim 11 requires "a derrick," claim 17 does not include a derrick limitation. Because only one of the two live apparatus claims contains a derrick limitation, the court is not persuaded that Transocean is entitled to judgment as a matter of law that its apparatus claims are not derived from the ME 5500 because the ME 5500 discloses two derricks.

However, both of the two live apparatus claims require two work stations (i.e., a first and second tubular advancing station), and a means for transferring tubular assemblies between them. GSF argues that asserted method claim 23 and "many of the method claims in the other patents-in-suit do not require such transfer." But "a process [i.e., method] patent must either be tied to a particular machine or apparatus or must operate to change articles or materials to a 'different state or thing.'" Schumer v. Laboratory

⁸¹GSF's Opposition to Transocean's Motion for Partial Summary Judgment that Transocean's Invention was Not Derived from the Twin Ram Rig or the ME 5500, Docket Entry No. 115, pp. 7-8.

Computer Systems, Inc., 308 F.3d 1304, 1312 & n.6 (Fed. Cir. 2002) (quoting Gottschalk v. Benson, 93 S.Ct. 253, 257 (1972)). The court is not persuaded that the failure of asserted method claim 23 to require transfer prevents the court from concluding that the apparatus required to perform the method described therein requires a means for transferring tubulars. Since GSF does not dispute that Transocean's apparatus claims each require a means for transferring tubular assemblies between two work stations, and that the ME 5500 does not disclose such a transfer means either expressly or inherently, the court concludes that GSF has failed to present any evidence, much less clear and convincing evidence, from which a reasonable fact-finder could conclude that either of the two remaining apparatus claims is derived from the ME 5500 because the ME 5500 does not disclose all the limitations of those claims. Accordingly, the court concludes that Transocean is entitled to judgment as a matter of law that its apparatus claims are not derived from the ME 5500.⁸²

⁸²Although Transocean has not sought summary judgment that the ME 5500 is not anticipatory prior art to its apparatus claims under 35 U.S.C. § 102(a) on these grounds, i.e., on grounds that the ME 5500 does not disclose all the limitations of its apparatus claims, the court's determination that the ME 5500 does not disclose all the limitations of Transocean's apparatus claims may preclude GSF from showing by clear and convincing evidence that the ME 5500 is anticipatory prior art under 35 U.S.C. § 102(a) regardless of whether the ME 5500 was known to others in the United States or described in a printed publication prior to Transocean's invention date. See Schering, 339 F.3d at 1377-1379 ("patent is invalid for anticipation if a single prior art
(continued...)

3. Conclusions on Derivation

For the reasons explained above, Transocean's motion for partial summary judgment that its invention is not derived from Maritime Hydraulics' Twin Ram Rig will be denied, and its motion for partial summary judgment that its invention is not derived from Maritime Engineering's ME 5500 will be granted.

D. Obviousness

GSF moves for partial summary judgment of invalidity of apparatus claims (Docket Entry No. 93). GSF argues that Transocean's apparatus claims are invalid because they were not new and were, instead, obvious from the prior art because the prior art includes "a drilling rig with two drill centers capable of working simultaneously on a single well."⁸³ Citing the Horn Patent and the GVA brochure as evidence that the prior art contained rigs with two drilling centers, and the Lund patent as evidence of "a drilling rig with a transfer means identical to the one covered by Transocean's patents,"⁸⁴ GSF contends that the combination of prior art references embodied by Transocean's invention would have been obvious as a matter of law to one with ordinary skill in the prior art. As evidence that the combination would have been obvious, GSF

⁸²(...continued)
reference discloses each and every limitation of the claimed invention").

⁸³GSF's Motion for Partial Summary Judgment of Invalidity of Apparatus Claims, Docket Entry No. 93, p. 1.

⁸⁴Id.

cites "recent admissions of Transocean's inventor, Robert Herrmann."⁸⁵ Transocean responds that GSF's motion for partial summary judgment on invalidity due to obviousness should be denied because "there are, at a minimum, genuine issues of material facts concerning (1) the content and differences from the invention and the prior art, (2) whether one skilled in the prior art would combine the references, as asserted by GSF, and (3) secondary considerations of non-obviousness."⁸⁶ The court agrees with Transocean.

1. Applicable Law

A patent claim is obvious, and thus invalid, when the differences between the claimed invention and "the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103. See Graham v. John Deere Co., 86 S.Ct. 684 (1966); Cross Medical Products, Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1321 (Fed. Cir. 2005). The ultimate determination whether an invention is obvious is a legal conclusion based on underlying factual inquiries including (1) the scope and content of the prior art, (2) the differences between the prior art

⁸⁵Id. at p. 2.

⁸⁶Plaintiff Transocean's Response to GSF's Motion for Partial Summary Judgment of Invalidity of Apparatus Claims, Docket Entry No. 110, p. 1.

and the claims at issue, (3) the level of ordinary skill in the pertinent field, and (4) the extent of any objective indicia of non-obviousness. See Graham, 86 S.Ct. at 684. See also Gambro Lundia, 110 F.3d at 1578. When, as here, obviousness is based on the teachings of multiple prior art references, to establish a prima facie case the movant must show some reason, suggestion, or motivation that would have led a person of ordinary skill in the art to combine the relevant prior art teachings in the manner claimed. See Tec Air, Inc. v. Denso Mfg. Michigan Inc., 192 F.3d 1353, 1359-1360 (Fed. Cir. 1999); Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1572 (Fed. Cir. 1996). "The reason, suggestion, or motivation to combine [prior art references] may be found explicitly or implicitly: (1) in the prior art references themselves; (2) in the knowledge of those of ordinary skill in the art that certain references, or disclosures in those references, are of special interest or importance in the field; or (3) from the nature of the problem to be solved, leading inventors to look to references related to possible solutions to that problem. Ruiz v. A.B. Chance Co., 234 F.3d 654, 665 (Fed. Cir. 2000) (quoting Pro-Mold, 75 F.3d at 1572).

The nonmovant may rebut a prima facie showing of obviousness with evidence refuting the movant's case or with other objective evidence of nonobviousness. See WMS Gaming, Inc. v. Int'l Game Tech., 184 F.3d 1339, 1359 (Fed. Cir. 1999). This type of evidence

may include evidence of commercial success, long-felt but unsolved need, failure of others to find a solution to the problem at hand, and copying of the invention by others. Id. See also Pro-Mold, 75 F.3d at 1572. "Whether the evidence presented suffices to rebut the prima facie case is part of the ultimate conclusion of obviousness and is therefore a question of law." In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998). "Therefore, '[w]hen determining the patentability of a claimed invention which combines two known elements, 'the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" Id. at 1356 (quoting In re Beattie, 974 F.2d 1309, 1311-1312 (Fed. Cir. 1992)).

Hindsight reasoning cannot be used to show that a combination of prior art was obvious. Ecolochem, Inc. v. Southern Cal. Edison Co., 227 F.3d 1361, 1371 (Fed. Cir. 2000), cert. denied, 121 S.Ct. 1607 (2001). "[T]he best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999). See also Ruiz, 234 F.3d at 665 (explaining that the temptation to engage in impermissible hindsight is especially strong with seemingly simple mechanical inventions). This is because "[c]ombining prior art references without evidence of such a suggestion, teaching, or motivation

simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability – the essence of hindsight." Id. A person of ordinary skill in the art must not only have had some motivation to combine the prior art teachings, but some motivation to combine the prior art teachings in the particular manner claimed. See In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000) ("Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed."); Gambro Lundia, 110 F.3d at 1579 ("absence of such a suggestion to combine is dispositive in an obviousness determination").

2. Analysis

Asserting that Transocean's invention is not new because it merely represents a combination of limitations disclosed in the prior art, GSF acknowledges that the obviousness question now before the court is whether the prior art would teach one of ordinary skill in the art "to combine the teachings of Horn/GVA with the common practice of offline stand building disclosed in the Lund patent."⁸⁷ Asserting that "[m]otivation to combine references 'may come [from] . . . the nature of the problem to be solved,' Cross Medical Prods., 424 F.3d at 1321, GSF argues that "in this case the problem to be solved . . . 'would be drilling a single

⁸⁷GSF's Motion for Partial Summary Judgment of Invalidity of Apparatus Claims, Docket Entry No. 93, p. 6.

exploration well offshore with procedure and equipment that would significantly increase the efficiency of the drilling process.'"⁸⁸ GSF then cites Transocean's validity expert, Claude E. Cooke, Jr., as stating that "it would have been obvious to one of ordinary skill in the art to use two drill centers on a rig like Horn to work simultaneously on a single well,"⁸⁹ and that "[o]nce inventors decided to take the obvious step of using a rig with two drill centers to work simultaneously on a single well, the transfer means between the two drill centers was 'just a matter of necessity.'"⁹⁰ GSF also cites the declaration of Transocean inventor, Robert Herrmann, as evidence that "the inclusion of a transfer means between two drill centers was obvious."⁹¹ GSF argues that the obviousness of Transocean's apparatus claims is also shown by the earlier or near-simultaneous design by Maritime Hydraulics of an offshore rig with two drill centers and a transferring means. See Ecolochem, 227 F.3d at 1379 (simultaneous invention can evidence obviousness).

The court is not persuaded that the evidence cited by GSF demonstrates that it is entitled to judgment as a matter of law

⁸⁸GSF's Reply to Transocean's Response to [GSF's] Motion for Partial Summary Judgment of Invalidity of Apparatus Claims, Docket Entry No. 120, p. 4 (citing Deposition of Claude E. Cooke, Jr., Exhibit 1 attached thereto, p. 79 (Cooke Deposition)).

⁸⁹Id. (citing Cook Deposition at pp. 151-152).

⁹⁰Id. (citing Cook Deposition at pp. 109-110).

⁹¹Id. (citing Herrmann Declaration, Exhibit 13 attached to Docket Entry No. 93, ¶ 10).

that Transocean's apparatus claims are invalid as obvious. Cooke did not testify that if the problem in this case were defined to one of ordinary skill in the art that use of a two drill center rig like that disclosed in the Horn/GVA references to work simultaneously on a single well would have been obvious, and that once the inventors decided to take that obvious step, addition of a transfer means between the two drill centers would become "just a matter of necessity." On the contrary, Cooke testified that it would have been obvious to use a transfer means between two drill centers only after it had been decided to use two drill centers to work simultaneously on a single well. Moreover, even assuming that GSF's representation of Cooke's testimony is accurate, it is wholly conclusory, lacking any reasoned explanation of how or why merely defining the problem to be solved would have made the combination of limitations embodied in Transocean's invention obvious to one of ordinary skill in the art.

GSF's citation to the Herrmann declaration is similarly insufficient to establish entitlement to summary judgment on the issue of obviousness because Herrmann was one of the inventors. If the mere fact that an inventor was motivated to combine references from the prior art to create the invention at issue were enough to prove obviousness, then every invention could be invalidated on this basis. GSF's failure to present any evidence for a specific source of motivation to combine the prior art references is a critical omission in its obviousness analysis.

Nor is the court persuaded that Maritime Hydraulics' earlier or near-simultaneous design of an offshore rig with two drill centers and a transferring means capable of establishing that GSF is entitled to judgment as a matter of law that Transocean's apparatus claims are invalid as obvious. Although the issue of simultaneous development is directly tied to what constitutes the level of knowledge attributable to one of ordinary skill in the art, it is rarely determinative of statutory obviousness. See Ecolochem, 227 F.3d 1361, 1379 (Fed. Cir. 2000) (citing Lindemann, 730 F.2d at 1460 ("[T]he possibility of near simultaneous invention by two or more equally talented inventors working independently, . . . may or may not be an indication of obviousness when considered in light of all the circumstances.")). See also The International Glass Co. v. United States, 187 S.Ct. 376, 408 (1969) ("The fact of near-simultaneous invention, though not determinative of statutory obviousness, is strong evidence of what constitutes the level of ordinary skill in the art.").

3. Conclusions on Obviousness

With hindsight, the court could perhaps agree that the combination embodied by Transocean's apparatus claims seems obvious. Since, however, GSF fails to provide any evidentiary basis for concluding that there was a suggestion, teaching, or motivation to combine the prior art references to obtain the claimed invention, GSF has failed to establish that it is entitled

to judgment as a matter of law on this basis. Although the Federal Circuit has held that "[t]he suggestion to combine may be found in explicit or implicit teaching within the references themselves, from the ordinary knowledge of those skilled in the art, or from the nature of the problem to be solved," Ecolochem, 227 F.3d at 1375, "there still must be evidence that 'a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.'" Id. The implicit assertion that a skilled artisan confronted with the problem of expediting the drilling process would select the elements from the cited prior art references and combine them in the claimed manner simply because Transocean's inventors did is not sufficient to establish entitlement to judgment as a matter of law. See In re Werner Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000) ("[A] rejection cannot be predicated on the mere identification . . . of individual components of claimed limitations. Instead, particularized findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed."). Since GSF has not presented evidence that would support particularized findings on the issue of motivation, the court concludes that its motion for summary judgment on obviousness should be denied.

V. Conclusions

For the reasons explained above in § IV.B.2-3, the court concludes that there exist genuine issues of material fact as to whether the ME 5500 is anticipatory prior art under 35 U.S.C. § 102(a) because it was either known to others in the United States or described in a printed publication prior to May 3, 1996, the application filing and presumptive invention date of the '851 patent, but that Transocean is entitled to judgment as a matter of law that Maritime Hydraulic's Twin Ram Rig was not anticipatory prior art under 35 U.S.C. § 102(a). Accordingly, Plaintiff Transocean's Motion for Partial Summary Judgment on Prior Art (Docket Entry No. 108) is **GRANTED IN PART** and **DENIED IN PART**.


For the reasons explained above in § IV.B.2.(b), the court concludes that the conception date for the patents-in-suit is May 3, 1996, the application filing and presumptive invention date for the '851 patent. Accordingly, GSF's Motion for Partial Summary Judgment Regarding Conception Date (Docket Entry No. 89) is **GRANTED**, and Plaintiff Transocean's Cross-Motion for Partial Summary Judgment Concerning Conception (Docket Entry No. 97) is **DENIED**.

For the reasons explained above in § IV.C.2, the court concludes that Transocean is entitled to judgment as a matter of law that its invention was not derived from Maritime Engineering's ME 5500, and that there exist genuine issues of material fact for

trial as to whether its invention was derived from Maritime Hydraulic's Twin Ram Rig. Accordingly, Plaintiff Transocean's Motion for Partial Summary Judgment that Transocean's Invention was Not Derived from either Maritime Hydraulics' Twin Ram Rig or Maritime Engineering's ME 5500 Brochure (Docket Entry No. 106), is **GRANTED IN PART** and **DENIED IN PART**.

For the reasons explained above in § IV.D.2, the court concludes that there exist genuine issues of material fact for trial as to whether Transocean's invention was obvious in light of the prior art. Accordingly, GSF's Motion for Partial Summary Judgment of Invalidity of Apparatus Claims (Docket Entry No. 93) is **DENIED**.

SIGNED at Houston, Texas, on this the 7th day of August, 2006.



SIM LAKE
UNITED STATES DISTRICT JUDGE